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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/420,806	10/19/1999	KAZUHIRO TSUJINO	991206	3316

23850 7590 10/23/2003

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 10/23/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,806

Applicant(s)

TSUJINO ET AL.

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☐ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities:

In the specification, the same label number "42" is used for "NTSC encoder 42" (page 8, line 6), and "buffer 42" (page 8, line 7).

On page 8, line 22, "the end circuit 42c" should be changed to --the AND circuit 42c--.

The same label number "45a" is used for "the write request generating circuit 45a" (page 9, lines 15-16), and "buffer read circuit 45a" (page 9, line 22).

The same label number "45b" is used for "the read request generating circuit 45b" (page 9, line 16), and "buffer write circuit 45b" (page 9, line 24).

On page 9, line 17, "ANC" should be changed to --AND--.

On page 12, line 17, "circuit 20" should be changed to --circuit 30--.

On page 16, line 11, "If $S < a$, in step S263" should be changed to --If $S < -a$, in step S263-- in order to be consistent with $S < -a$ in step S263 in Figure 7.

Appropriate correction is required.

Claim Objections

3. Claims 4-7 are objected to because of the following informalities:

Claim 4 (line 6), "said recording process" should be changed to --said record process--.

Claims 5-7 are objected as being dependent on claim 4.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake (US 5,767,904) in view of Horii (US 6,018,363).

Regarding claim 1, Miyake discloses a digital camera for performing continuous shots of a subject with different exposures, comprising a first register for holding exposure data (the internal RAM of CPU 37 stores shutter speed data, column 14, lines 1-5); a timing generator for causing exposure according to exposure data held in said first register in response to said timing signal (clock generator 24, figure 1, column 10, lines 11-53); an instruction key for instructing for a continuous shot operation (single/continuous switch 36, figure 1, column 8, lines 45-64); a processor for starting to count said timing signal in response to an instruction of said instruction

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key (Every time imaging is performed for each frame, the CPU 23 increments the number of frames continuously taken one beginning with 1, figure 1, column 9, lines 33-40), and performing an update process to update said exposure data held in said first register in first determined timing (column 9, lines 60-67).

Miyake fails to specifically disclose a signal generator for generating a timing signal. However, Horii discloses a synchronous signal generator 107 for generating timing signal supplied to timing generator 112 (figure 5, column 10, lines 1-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Miyake by the teaching of Horii in order to generate timing signal for control data read out from image sensor in a camera.

Regarding claim 2, Miyake discloses an image sensor (CCD 11, figure 1), wherein said timing generator controls a charge storage period on said image sensor according to said exposure data held in said first register (column 1, lines 20-22).

Regarding claim 3, Miyake discloses wherein said processor starting to count said timing signal in response to an instruction of said instruction key (Every time imaging is performed for each frame, the CPU 23 increments the number of frames continuously taken one beginning with 1, figure 1, column 9, lines 33-40) and performs a record process to record shot image data obtained by said exposure in second predetermined timing (shot image data is stored in memory card 19, figure 1).

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Regarding claim 8, Miyake discloses wherein said processor performs an adjustment process of said exposure over a predetermined period after ending said continuous shot (column 22, lines 1-6).

Allowable Subject Matter

6. Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohta (US 5,101,276) discloses electronic still camera.

Tsai (US 5,309,243) discloses method and apparatus for extending the dynamic range of an electronic imaging system.

Kondo (US 5,471,242) discloses still image pickup apparatus with shortened exposure time.

Ejima et al. (US 6,327,423) disclose information processing apparatus and recording medium.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is **(703) 308-9297**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on **(703) 305-4929**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

LN LN
10/19/2003


AUNG MOE
PRIMARY EXAMINER